

## WHAT IS CLAIMED IS:

1. A crucible used in the growth of polycrystal silicon by a cast method, comprising:

a crucible body for, when solid material silicon is melted, containing the melted material silicon; and

a material holder provided on the crucible body, for holding further material silicon on the material silicon loaded into the crucible body.

2. A crucible according to claim 1, wherein the material holder is detachable from the crucible body.

3. A crucible according to claim 1, wherein an inner space of the material holder for holding the material silicon is gradually increased toward an upper portion of the material holder.

4. A crucible according to claim 2, wherein a lower portion of the material holder is inserted into and held by an upper portion of the crucible body.

5. A crucible according to claim 1, wherein a size of the crucible body is designed so that when the material

silicon loaded into the crucible body and the material holder is melted, an upper surface of the melted material silicon is positioned close to the upper portion of the crucible body.

6. A crucible according to claim 2, wherein the material holder is made of a material different from that of the crucible body.

7. A crucible according to claim 6, wherein the crucible body is made of baked silica, and the material holder is made of a material containing carbon.

8. A crucible according to claim 2, wherein a groove is provided at a lower portion of the material holder, the groove fits an upper portion of the crucible body, the material holder is held by fitting the groove to the crucible body.

9. A method for growing polycrystal silicon, comprising the steps of:

loading a solid material silicon into the crucible body and the material holder of the crucible of claim 1;  
heating the loaded material silicon so as to be

melted; and

coagulating the melted material silicon in the  
crucible body.

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